

REVIEWS

Oke, Charles, Aculagnathidae. A New Family of Coleoptera, (Proc. Roy. Soc. Victoria, 44 (N.S.), pt. 1, 1932, pp. 22-24, 1 pl.)

Even though this paper has been in print for fifteen years, a review of it is of interest because the evidence cited is not generally known by the North American Coleopterists. Mr. Oke describes what he terms as "a very anomalous beetle" which is remarkable in that it has what are thought to be sucking mouthparts. He states that "a similar condition is found in the Clavergerinae, where the mouthparts are so atrophied that they are very indistinct and quite useless." The North American collector is familiar with the Meloid genus Nemognatha which have the galeae produced somewhat in the same manner as the Lepidoptera, and are thought by some to be capable of sucking nectar. (This however, is doubtful). Mr. Oke has described Aculagnathus mirabilis which is a small beetle measuring only 1.50 mm. and inhabits the nests of Amblyopone ants. They are genuine inquilines, and lack teichomes. But the most remarkable feature of these beetles is the modification of the mouthparts. The mouthparts are very small, the mandible is highly specialized, placed somewhat transversely, with a long thin process on its outer edge, which normally rests within the labrum. When the mandible is moved the end of this process protrudes beyond the labrum and is evidently used for piercing its prey. The labrum is curled over on its edges and forms an open sheath for the styliform processes of the mandibles, the sheath being partly closed by a thin, membranous extension of the labrum below. At the time of Mr. Oke's writing, only a few specimens had been found (number not stated). The article does not mention the location of the type of this species. It is found in Victoria.

- R. H. A.

Paulian, Renaud, Les Coléoptères; Formes - Moeurs - Rôle, Bibliothèque Scientifique, Payot, Paris, 1943, 396 pp., 164 figs., 14 plates.

This book, which is prefaced by the well known French Coleopterist, Dr. R. Jeannel, is a thorough, well organized, well written introduction to the Order Coleoptera. Unfortunately, the paper which was used for this book is of a very poor grade, and consequently, the page illustrations, even though well made are not as distinct as might be wished. Dr. Paulian makes liberal use of footnote references, but he does not have a very extensive bibliography. He includes an index to authors and an index to species, but there is no subject index.

The book is divided into two parts, the first deals with the structure and habits, while the second deals with the distribution, evolution, and relationship to man. This book is so well organized, that it may not be out of place to list the contents of the chapters to show the organization and scope. Chapter one defines the order, discusses the general morphology and briefly summarizes the classification; chapter two deals with the fossil beetles, while chapter three is on the physiology of beetle nutrition; sex, courtship and development are covered by chapters four and five. The remainder of part one deals with the effects of environment, types of adaptation, and reproduction.

Part two has five chapters, the first devoted to habitat types, the second to zoogeography, the third to the faunas of beetles, the fourth to the formation of the species, and the final chapter to man's interest in beetles.